

CLAIMS

1. A microcomputer heat dissipation system comprising heat-absorbing units, said heat-absorbing units being bonded to heat-generating electrical components inside the microcomputer and disposed in communication with a fluid circulating unit, and, to said fluid circulating unit, there is serially connected at least a heat-radiating pipe bondable to a heat-radiating plate, with said heat-radiating plate disposed on the outer wall surface of a chassis.

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2. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that the fluid circulating unit includes at least one pump, with fluid circulation in the fluid circulating unit provided by said pump.

3. The microcomputer heat dissipation system as set forth in claim 2, which is characterized by the fact that the pump of the above-mentioned fluid circulation system is securely attached inside the chassis and has a shock-absorbent connection to the chassis.

4. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that the above-mentioned heat-absorbing units are constructed as a sealed hollow cavity provided with an inlet and an outlet for fluid, with said sealed cavity furnished with at least one heat-absorbing face, said heat-absorbing face being bondable to the heat-generating components.

5. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that a plurality of heat-absorbing units are disposed in communication with the fluid circulating unit via parallel connection.

6. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that a plurality of heat-absorbing units are disposed in communication with the fluid circulating unit via serial connection.

7. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that a plurality of heat-absorbing units are disposed in communication with the fluid circulating unit simultaneously via serial and parallel connection.

8. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that there is at least one heat-radiating plate disposed on the outer wall surface of the chassis, and said heat-radiating plate is disposed on the top wall or side wall of the chassis.

9. The microcomputer heat dissipation system as set forth in claim 8, which is characterized by the fact that the heat-radiating plate can be attached to the chassis through the medium of a mounting support, with the heat-radiating pipe passing through the wall of the chassis and bonded to the heat-radiating plate.

10. The microcomputer heat dissipation system as set forth in claim 8, which is characterized by the fact that a heat-dissipating structure may be provided on the outer wall surface of the above-mentioned chassis, thereby forming a heat dissipating plate.

11. A microcomputer heat dissipation system comprising a power supply heat dissipation system and a circulation-based heat dissipation system inside a microcomputer chassis, which is characterized by the fact that in the power supply heat-absorbing unit, the high-power transistors of said power supply unit are connected to the heat-radiating plate via a heat-conducting device by means of planar contact, and that the above-mentioned circulation-based heat dissipation system is made up of heat-absorbing units bondable to heat-generating electrical components and said heat-absorbing units are in communication with a fluid circulating unit, and, to said fluid circulating unit, there can be serially connected at least a heat-radiating pipe bondable to the heat-radiating plate, with said heat-radiating plate disposed on the outer wall surface of the chassis.

12. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the heat-generating surfaces of the high-power transistors are bonded to a heat-conducting device, said heat-conducting device preferably being a heat-conducting metal plate, with bonding to the above-mentioned heat-radiating plate carried out via the metal heat-conducting plate.

13. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the high-power transistors are connected to a power supply unit circuit via a circuit board.

14. The microcomputer heat dissipation system as set forth in claim 12, which is characterized by the fact that the high-power transistors are connected to a power supply unit circuit via a circuit board.

15. The microcomputer heat dissipation system as set forth in claim 13, which is characterized by the fact that said circuit board is connected, via a circuit, to a connector socket, said socket being solderable to the circuit board, and the plug end, which is connected to the socket, is connected by a wire belt to the location where the high-power transistors are soldered to the power supply circuit board.

16. The microcomputer heat dissipation system as set forth in claim 14, which is characterized by the fact that said circuit board is connected, via a circuit, to a connector socket, said socket being solderable to the circuit board, and the plug end, which is connected to the socket, is connected by a wire belt to the location where the high-power transistors are soldered to the power supply circuit board.

17. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that said heat-conducting device is coupled to the heat-radiating plate using a pressure plate device.

18. The microcomputer heat dissipation system as set forth in claim 12, which is characterized by the fact that said heat-conducting device is coupled to the heat-radiating plate using a pressure plate device.

19. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the fluid circulating unit connected to the heat-absorbing units includes at least one fluid feed pump.

20. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the heat-absorbing units can be designed as a sealed hollow cavity provided with an inlet and an outlet for fluid, with said sealed cavity provided with at least one heat-absorbing face, said heat-absorbing face being securely bondable to the heat-generating components.

21. The microcomputer heat dissipation system as set forth claim 11, which is characterized by the fact that a plurality of heat-absorbing units are disposed in communication with the above-mentioned fluid circulating unit by means of a parallel connection.

22. The microcomputer heat dissipation system as set forth claim 11, which is characterized by the fact that a plurality of heat-absorbing units can be disposed in communication with the fluid circulating unit via serial connection.

23. The microcomputer heat dissipation system as set forth in claim 1, which is characterized by the fact that a plurality of heat-absorbing units is disposed in communication with the above-mentioned fluid circulating unit simultaneously via serial connection and parallel connection.

24. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the heat-radiating pipe is a metal heat-radiating pipe, with said heat-radiating pipe bonded to a heat-radiating plate disposed on the outer wall surface of the chassis.

25. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that there is at least one or more heat-radiating plates and said heat-radiating plate(s) are attached to the outer wall surface of the microcomputer chassis by means of a mounting support, with a receiving space provided on the outside of said mounting support.

26. The microcomputer heat dissipation system as set forth claim 11, which is characterized by the fact that the above-mentioned heat-radiating pipe is bonded to the heat-radiating plate and is mounted in the receiving space of the mounting support.

27. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the heat-absorbing units are provided with a hollow cavity as well as with an inlet and an outlet for fluid connected by means of connectors to the

hollow cavity, with said heat-absorbing units having a heat-absorbing plate on at least one face thereof.

28. The microcomputer heat dissipation system as set forth in claim 16, which is characterized by the fact that the fluid feed pump has a shock-absorbing device.

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29. The microcomputer heat dissipation system as set forth in claim 23, which is characterized by the fact that the fluid feed pump can be enclosed in a shock-absorbing casing and said casing can have at least two layers, with a shock-absorbing structure provided between the two layers of the casing; and, in the bottom portion of the casing, there may be provided shock-absorbing supports, with said shock-absorbing supports attached to the bottom of the chassis.

30. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the outer wall surface of the above-mentioned chassis can be made up of a mounting support and a heat-radiating plate, with the above-mentioned heat-radiating plate disposed on the outside of said mounting support.

31. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact that the mounting support has a recess, with the above-mentioned heat-radiating pipe or heat-conducting device bonded to the heat-radiating plate and mounted in the recess of the mounting support.

32. The microcomputer heat dissipation system as set forth in claim 30, which is characterized by the fact that the mounting support has a recess, with the above-mentioned heat-radiating pipe or heat-conducting device bonded to the heat-radiating plate and mounted in the recess of the mounting support.

33. The microcomputer heat dissipation system as set forth in claim 11, which is characterized by the fact the heat-radiating plate can be fabricated by press-forming from metal, with heat-radiating ribs provided on its top face.